Title:

Theory of Online Market Gravity — Principle 2:

The Outcome Misalignment Principle: Markets as Relational Tension

Abstract

This paper introduces the Outcome Misalignment Principle, the second in a framework for understanding how digital markets function and fail. Principle 1 established that platforms optimize what they measure—often at the expense of their original purpose. Principle 2 advances this by redefining what a market is: not a product or a platform, but the structured tension between divergent needs—those of the platform and the user. In adaptive markets, this tension enables mutual constraint, trust, and recalibration. In extractive systems, where tension collapses, platforms optimize for metrics that serve their own needs while erasing the user's ability to shape what matters, leading to hidden inefficiencies and long-term decline. Through comparative analysis of platforms like Amazon, Coursera, and app stores versus Craigslist, recruiters, and ATS systems, this paper demonstrates that tension is not a flaw in market design—it is the foundation. We conclude that a digital market's ability to evolve depends on preserving relational tension between its actors, which makes measurement reflective, not rigid.

Introduction: The Market as Tension

Most digital platforms promise scale, efficiency, and convenience. But users can experience these systems as frustrating, opaque, and extractive. Why?

The first principle in this theoretical framework offers one explanation. Principle 1: The Measurement Optimization Principle holds that *markets optimize what they measure*—even if what they measure drifts away from what users value. When a platform ties success to engagement, click-throughs, or volume—rather than outcome, resolution, or satisfaction — it reorients itself around metrics that serve the business, not the user (Espeland & Sauder, 2007; Goodhart, 1975). Over time, platforms come to serve the measure, not the mission.

But this raises a deeper structural question: What is a market, exactly?

This paper introduces a second principle—The Outcome Misalignment Principle—to address that question. It proposes that a market is not the platform. It is not the user. A market is the structured tension between them.

That tension is not dysfunction. It *is* the system.

A market emerges when two actors—platform and user—want different things but depend on one another to achieve them. Platforms seek profit, growth, and retention. Users seek clarity, resolution, and outcome. When both parties retain the ability to shape the tension between them to a degree that is mutually satisfactory, the market is functional. That tension constrains behavior, drives adaptation, and enables the platform to reflect on what it measures.

But when the system shifts too far in one direction—when one party defines the metrics unilaterally — the tension can collapse. The market becomes something else: a machine that feeds one side while extracting from the other. Trust erodes. Feedback disappears. Users either disengage, retaliate, or drop the rope entirely.

This paper explores that tension. We compare adaptive markets—where relational tension is preserved through persistent feedback loops—with non-adaptive platforms that erase user input and drop tension. Using case studies in e-commerce, e-learning, and app distribution—and their static counterparts in hiring (Craigslist, recruiters, and ATS systems)—we argue that relational tension is the structural condition that makes functional measurement possible.

The sections that follow formally define Principle 2 and its implications. We then compare adaptive and non-adaptive cases in matched pairs, evaluate structural consequences, and close with theoretical synthesis and directions for future research.

2. Literature Review

This paper draws on cross-disciplinary theories of measurement, system design, and relational exchange to support a new model of digital markets: one in which relational tension itself constitutes the market. Rather than viewing platforms as neutral mediators or autonomous engines of value, this framework positions platforms as structured sites of interdependence, where user needs and platform incentives are held in productive—or sometimes collapsed—tension. This section reviews the relevant literature supporting this shift, grouped into two domains: measurement and system optimization, and relational market structure.

2.1 Systems Thinking and Measurement

Markets drift toward the metrics that define their logic. Espeland and Sauder (2007) describe how rankings become performative: once measured, a metric alters the behavior it was meant to observe. This recursive dynamic—reactivity—is central to

the theory that platform behavior evolves not based on mission, but on measurement gravity. Their work pairs with Goodhart's Law (1975), which famously warns that *"when a measure becomes a target, it ceases to be a good measure."*

Dahler-Larsen (2014) expands this view by showing how performance indicators often take on symbolic functions—representing legitimacy even when they no longer correspond to actual outcomes. This is especially true in environments with weak feedback loops, where metrics persist unchallenged.

Tufekci (2015) and Gillespie (2018) bring these insights into the domain of platform design, illustrating how algorithmic systems entrench specific forms of engagement while obscuring user voice. Their work demonstrates that feedback loops in digital environments are not neutral—they are shaped by what platforms are structurally willing to hear.

Together, this literature shows that metrics are not passive reflections—they are structural forces. In the absence of responsive tension between platform and user, they drift toward internal optimization, regardless of real-world value.

2.2 Relational and Economic Theories

If measurement defines drift, relational structure defines whether that drift can be resisted. A growing body of literature affirms that markets are not neutral exchanges but relational systems. In this view, the ability of a system to adapt depends not just on internal metrics, but on whether users can exert structural influence over what matters.

Dyer and Singh (1998) articulate a *strategic relational view*, showing how interorganizational value is created when entities operate under mutual constraint and information flow. Their framework supports the idea that adaptive markets are ones where both parties shape outcomes—even without formal co-governance.

Baxter and Montgomery (1996) offer a foundational contribution through Relational Dialectics Theory, which treats tension not as a problem, but as the structural basis of relationship. Their insight—that all functional systems must balance opposing needs—aligns directly with this paper's core claim: that markets only function when tension is preserved.

Emerson (1976) and Blau (1964), in their development of social exchange theory, describe how power emerges from interdependence and constraint. While their original focus was interpersonal, their logic extends cleanly into platform dynamics: users without leverage become invisible, and systems without constraint become extractive.

Finally, Callon (1998) reframes markets not as natural entities but as socio-technical constructions—assembled through tools, rules, and interfaces that define what can be measured and how. His concept of *market devices* directly supports this paper's position that platform architecture determines whether user tension is absorbed, reflected, or erased.

Synthesis

Taken together, this literature supports the following claim:

A digital market functions only to the extent that it preserves live, reciprocal tension between platform and user—allowing metrics to reflect shared, evolving meaning.

When tension is structurally absent or collapsed, measurement becomes extractive. When tension is held in dynamic balance, measurement becomes reflective to meet the needs of all users.

This is the structural distinction between adaptive and non-adaptive markets. The next section defines this distinction more precisely through the Outcome Misalignment Principle.

3. The Tension Is The Market

Digital platforms often appear efficient on the surface—delivering fast access, personalized interfaces, and scalable transactions. Yet beneath this apparent functionality lies a deeper structural question: *Are markets optimizing for what users need or businesses need?*

This section introduces the economic tension that explains how digital platforms/businesses and user values overtly misalign and that misalignment creates the functionality of the market itself.

3.1 Defining the Principle

The Functional-Tension Axiom states:

The tension between platform engagement objectives and user solution-seeking is the essential condition for meaningful market function

Put another way, markets are not powered by harmony – they are powered by tension held in a dynamic feedback loop. Markets only function when users and platforms are pulling in different directions—but still remain in structural communication.

While this axiom may appear self-evident to those trained in systems thinking, its absence in most platform design and digital economic theory underscores the need to name it outright.

Essentially market without tension cannot create reflections on appropriate mutually desired goals to measure—and so begin to serve one users survival over the others (extractive) or perhaps make the user a servant of it (system inversion) up until the distressed user disconnects from the market entirely.

Over time, a platform that once helped users succeed may start optimizing for signs of life that are easier to track: engagement, volume, repeat use. It celebrates applications, not hires; course starts, not learning; clicks, not comprehension. The user may still be present—but they are no longer formative.

This drift echoes **Goodhart's Law** (1975): *"When a measure becomes a target, it ceases to be a good measure."* But the Outcome Misalignment Principle goes further:

It's not just the metric that changes—it's the entire system's relationship to the user that begins to disappear from view.

3.2 Why Tension Matters

A market is not a business, and it is not a customer. It is the **structured tension** between them.

That tension emerges when two actors—platform and user—want different things but need one another to get them. The platform wants growth, monetization, retention. The user wants clarity, resolution, and meaningful outcome. The market only exists when both sides—platform and user—can shape the conditions of exchange, even if unequally.

This shaping happens through **voice**.

- The **platform speaks through metrics**—clicks, conversions, engagement scores. These are structured, internalized, and often optimized automatically.

- The **user speaks through feedback**—reviews, drop-offs, time-to-completion, and even silence. These signals are messier, slower, harder to standardize. But they are no less real.

Tension is what allows both voices to matter.

In markets where relational tension is preserved, feedback loops stay open. User signals may not drive governance directly, but they **constrain** it.

- Ratings alter visibility.

- Churn affects viability.

- Public reputation affects trust.

When tension collapses—when user feedback is decoupled from what the platform hears—**metrics float free from the market**. The platform continues to measure, but those measurements no longer reflect real-world outcomes. They become self-referential. The user becomes noise.

The result is not necessarily collapse—but it is always drift.
Drift becomes dangerous when the user can no longer create enough tension to trigger reflection. At that point, the system is no longer relational. It is closed.

And a closed system does not evolve.

3.3 Structural Drift in Practice

This pattern is visible across sectors. In many platform environments:

- User voice is absent, or profoundly limited. There's no mechanism for users to shape what counts.

- Measurement is static. Metrics are set by the business and rarely reexamined.

- Optimization becomes extractive. Engagement is rewarded even when it has no correlation with value.

Tufekci (2015) and Gillespie (2018) document how platforms like Facebook, YouTube, and Twitter adjust internal metrics based on business goals, often overriding or ignoring emergent user outcomes. Similarly, Dahler-Larsen (2014) shows how measurement tools become symbolic substitutes for actual success— legitimating systems that no longer meet their intended purpose.

3.4 Why Adaptive Systems Work Differently

Contrast this with systems where users can influence what gets measured. E-commerce platforms, for example, may prioritize purchase volume—but they also surface quality through verified reviews. Sellers are held accountable by buyer feedback. App stores similarly rely on user ratings and crash reports to rank visibility. In both cases, relational tension between user and platform drives measurement evolution.

Crucially, user feedback serves more than the platform. Even when ignored by governance, visible feedback empowers other users. It enables informed decisions, trust calibration, and decentralized quality control. On Amazon, a review that says "runs small" or "this seller never shipped" may not affect platform algorithms—but it shapes user behavior. Public reviews serve as functional word-of-mouth: a way to observe who is "in the store" with you and what their outcomes were. Feedback, when visible, becomes a relational constraint—not only on the platform, but on sellers, and on user choice itself.

This does not imply users co-govern the system. Rather, their feedback reshapes both how platforms define success *and* how users navigate within that definition. This creates recursive feedback loops: user behavior responds to platform priorities, and in turn may provoke platform recalibration. This dynamic reflects Dyer and Singh's (1998) strategic relational view, which argues that long-term value emerges when firms operate in systems of mutual responsiveness—even without formal symmetry of power.

3.5 Restating the Principle in Practice

Markets become extractive not because they fail to measure—but because they measure in isolation – aka peace where only one voice is heard - not tension. When relational tension is preserved, measurement remains dynamic. It reflects both sides. When tension collapses, platforms evolve into systems that grow by failing the user.

A digital market's ability to serve outcomes is directly tied to its willingness to be constrained by the user's experience.

This is the core of the Functional Tension Axiom: The tension is the is the market. And measurement without tension becomes pathology.

4. E-Markets With Tension: Adaptive Systems That Reflect What They Measure

In platform-based markets, the presence of relational tension between platform operators and users is not a dysfunction but a critical feature of adaptive system design. While users are not co-governors in a formal or institutional sense, their ongoing feedback—especially when it is visible and structurally encoded—can influence how platforms define, prioritize, and adjust their key performance indicators (KPIs). This feedback does not merely inform platform design; it constrains it, forcing re-evaluation of what counts as success. In this sense, user behavior becomes a form of informal governance—a bottom-up pressure that tempers top-down optimization (van Dijck, Poell, & de Waal, 2018).

Markets that evolve in response to these tensions operate as adaptive systems (Holland, 2006). They preserve a dynamic equilibrium in which the platform's optimization logic is continually reshaped by the experiences and actions of its users. Importantly, this adaptation does not require platforms to be egalitarian or democratic. What matters is that feedback loops are visible, meaningful, and consequential—allowing user input to shape both peer behavior and future platform configurations (Gillespie, 2018; Tufekci, 2015).

In this context, relational tension refers to the structured conflict between differing stakeholder goals—such as between buyers and sellers on an e-commerce site, or between app developers and end users on a mobile platform. When mediated through mechanisms such as verified reviews, crash reports, and public satisfaction ratings, this tension becomes productive. It drives iterative recalibration, limits extractive drift, and enables user-aligned accountability (Dahler-Larsen, 2014; Helmond, 2015).

These systems differ markedly from closed or extractive markets, where optimization occurs in isolation from user experience. In adaptive markets, the user's experience shapes what is measured, not merely what is consumed. In this way, feedback visibility serves both as an epistemic function and a regulatory mechanism—enabling individual users to make better decisions while collectively reorienting the behavior of sellers, developers, and even the platform itself (Murray, 2017).

This model aligns with Dyer and Singh's (1998) relational view of value creation, which emphasizes that sustained performance gains emerge from mutual responsiveness, even absent formal power symmetry. Platforms that preserve this

relational tension avoid the pitfalls of metric drift (Strathern, 1997), respond more precisely to emergent patterns, and maintain relevance in dynamic environments.

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4.1 E-Commerce Platforms (Amazon, Etsy)

Mirror Case: Craigslist

E-commerce platforms such as Amazon and Etsy exemplify digital marketplaces where relational tension between buyers and sellers is preserved and structured to enable market adaptation. Buyers seek affordability, reliability, and product quality, while sellers prioritize reach, profitability, and visibility. These conflicting objectives are held in productive tension through a combination of trust infrastructure mechanisms—including verified reviews, dynamic search rankings, return policies, and platform-mediated dispute resolution systems (Zervas, Proserpio, & Byers, 2021; Einav, Farronato, & Levin, 2016).

Crucially, these platforms make user feedback both visible and consequential. A seller's negative reviews, delayed shipping reports, or poor product quality directly impact their future discoverability and conversion rates. The visibility of feedback creates what van Dijck, Poell, and de Waal (2018) call "relational governance": power is exerted not only by the platform, but also by the aggregate response of its users. As a result, sellers must iteratively adapt to meet evolving buyer expectations—or risk exclusion from competitive rankings (Chevalier & Mayzlin, 2006).

Platforms, too, are responsive to these feedback loops. Surfacing logic—the algorithmic ranking of sellers and products—is frequently adjusted to optimize trust signals, click-through rates, and post-purchase satisfaction. These updates are often derived from aggregate user behavior patterns such as purchase history, return frequency, and review language sentiment (Burtch, Carnahan, & Greenwood, 2018). Thus, trust emerges as the true currency: not merely in product quality, but in the system's ability to reflect accurate user experience over time.

In sum, e-commerce platforms that structure relational tension into their architecture can evolve with user needs. By making feedback consequential, they allow markets to self-correct and re-align. As platforms respond to these user-generated signals, measurement becomes a site of adaptation, enabling functional calibration between divergent stakeholder goals (Dyer & Singh, 1998; Murray, 2017)

4. 2 E-Learning Platforms (Coursera, Skillshare, Udemy)

E-learning platforms represent a distinctive class of adaptive digital markets where platform design allows user experience to influence systemic evolution. Learners typically enter these environments seeking tangible outcomes—acquired skills, professional advancement, or career mobility—whereas platforms often optimize for more readily measurable internal metrics such as video engagement, time-on-platform, or course enrollment volumes (Seaton et al., 2014; Reich, 2020). While these priorities can diverge, structural feedback mechanisms serve as a mediating layer between platform incentives and user value.

Key among these feedback mechanisms are **dropout rates**, **completion metrics**, and **user-generated course reviews**, which operate not only as internal quality signals but also as public trust infrastructures (Chuang & Ho, 2016). These metrics are incorporated into course visibility algorithms, platform recommendation systems, and user search filtering—directly influencing which instructors gain prominence and which offerings sustain long-term viability (Zheng et al., 2020). As a result, instructors are compelled to engage with user feedback and continuously adapt their course material to meet learner expectations—or risk obsolescence.

In these systems, feedback does not require formal user governance to exert systemic influence. Rather, it acts as a **constraint on platform logic**, pushing content providers and algorithms toward a more learner-responsive equilibrium (Veletsianos & Shepherdson, 2016). Courses that fail to serve learner needs tend to fade from prominence, while others are refined, restructured, or retired based on continuous signals from user engagement patterns and satisfaction indicators. This feedback-driven adaptation introduces **a quasi-organic learning process** into the platform itself—one in which content quality is not just curated by platform staff but emergently shaped by user experience over time.

Despite their transactional structure and lack of formal user co-governance, these e-learning systems illustrate how **relational tension can drive functional evolution**. When platforms embed learner-centered feedback into how success is defined and surfaced, they allow for a form of **indirect user agency**: one that disciplines content supply through collective demand and reinforces quality through ongoing visibility calibration (Dillahunt, Wang, & Teasley, 2014).

4.3 App Stores (Google Play, Apple App Store)

Mobile application stores exemplify adaptive digital ecosystems where platform success metrics—such as installs, engagement duration, and monetization—exist in productive tension with user experience. While platform operators retain central control over visibility algorithms, user feedback is structurally embedded into the platform logic, influencing both supply-side behavior and surface-level discoverability.

User reviews, crash reports, and star ratings function not only as quality assurance tools, but as public trust signals within the ecosystem. They are aggregated into app ranking algorithms and serve as both reputational constraints and incentives for developers (Harman, Jia, & Zhang, 2012). Developers whose applications generate negative feedback, frequent technical issues, or poor usability often experience suppressed visibility and reduced install rates, as platform algorithms de-emphasize low-rated content (Martin, Sarro, Jia, Zhang, & Harman, 2016). In this way, user feedback reshapes the system's notion of quality—prompting developers to iteratively refine their products in pursuit of continued viability.

Importantly, this feedback loop operates without requiring users to co-govern the platform. Rather, platforms respond to aggregated user input through automated reputational filtration—updating search result prominence, feature eligibility, or category rankings based on multi-dimensional behavioral and sentiment data (Pagano & Maalej, 2013). Thus, app stores provide a clear model of a system where feedback

partially defines success: not purely through internal metrics, but by integrating externalized user evaluation into adaptive infrastructure.

These dynamics show how structured relational tension between platform metrics and user perception can produce a self-correcting digital marketplace. While commercial incentives remain dominant, feedback systems act as a counterweight that forces alignment between developer behavior and user satisfaction. The user may not direct the system, but their collective response becomes a constraint on which applications thrive and which are deprecated.

4.4 Synthesis: Adaptive Markets Preserve Tension

Adaptive digital marketplaces are not democracies. Users do not hold formal governance authority. However, these systems are relationally structured, and their performance is shaped by how they manage the ongoing tension between platform incentives and user outcomes. In high-functioning ecosystems, user feedback operates as a functional constraint, reorienting platform behavior even in the absence of formal user control (Benkler, 2006).

Crucially, the visibility of feedback is what allows this constraint to function. When users can see one another's evaluations—through reviews, ratings, rankings, or behavioral cues—they are able to self-adjust, calibrate trust, and coordinate informally. This shared visibility does not just inform individual choice; it fosters community-driven accountability, where actors across the system respond to a shared sense of signal.

This dynamic preserves what might be termed constructive relational tension: the ongoing friction between top-down platform design and bottom-up user response. That tension acts as a counterbalance to platform drift—where metrics become misaligned with real-world outcomes—and helps avoid both user detachment and extractive logic (Zuboff, 2019). In essence, tension is not a threat to platform functionality; it is a precondition for responsive evolution.

When platforms insulate themselves from user influence—whether by hiding feedback, ignoring experiential signals, or divorcing ranking from outcomes—they begin to drift. Over time, these systems may stagnate or devolve into exploitative structures that prioritize surface metrics over substantive value creation. By contrast, platforms that embed tension into their design—where user behavior and platform logic remain mutually responsive—retain the capacity to evolve, adapt, and align.

5. Markets Without Tension: Extractive Systems That Collapse Feedback

Not all digital platforms operate as functional markets. While they may enable transactions, they often lack the relational infrastructure required for adaptive evolution. In these systems, user input is not structurally legible to the platform. Feedback—if it exists at all—is neither public nor consequential. The result is a collapse of relational tension, the very force that drives alignment and evolution in adaptive systems.

Without tension, platforms drift toward metric myopia: an obsessive focus on internal performance indicators (e.g., volume, clicks, funnel completions) with

no structural pressure to validate those metrics against user experience or outcome quality (Muller, 2018; O'Neil, 2016). These platforms function, but not as relational marketplaces. They become extractive systems, in which users are converted into data streams and value is decoupled from service quality or transparency.

5.1 Craigslist: Static Infrastructure Without Trust

Craigslist illustrates how the absence of visible, consequential user feedback can lead to platform stagnation. Unlike Amazon or Etsy, Craigslist never implemented a verified review system, user ratings, or adaptive ranking logic. Its listings remain flat and unmoderated, with no mechanism to surface reliable sellers or penalize misleading posts.

As a result, trust is externalized—users must rely on personal heuristics or third-party coordination (e.g., forums, scam lists). Without structural feedback loops, Craigslist failed to evolve in high-friction verticals like housing, gig work, or commerce. Even as competitors developed trust scaffolding, Craigslist's minimalist model remained frozen (Plantin et al., 2018). Over time, user engagement declined in areas requiring assurance and reliability, a predictable outcome when feedback visibility and adaptation are absent.

5.2 Recruiters: Gatekeeping Without Accountability

Recruiters, as intermediaries between job seekers and employers, operate with significant structural opacity. In most cases, they are not accountable to job seekers in any meaningful way. There is no formal mechanism for candidates to evaluate recruiter performance, provide feedback on process integrity, or verify employer responsiveness.

This results in asymmetric relationships: job seekers supply resumes, complete interviews, and endure long silences—but their experience has no systemic influence on recruiter practices or platform design. By contrast, e-learning platforms (Section 4.2) must respond to user dissatisfaction via reviews, dropout metrics, or course abandonment. Recruiters operate in a feedback vacuum, making them structurally extractive and resistant to user-centered reform (Gray & Suri, 2019).

5.3 Applicant Tracking Systems (ATS): Optimization Without Relationality

ATS platforms typify what happens when performance is defined entirely from the internal perspective of the system. These tools optimize for quantitative funnel metrics—resume volume, keyword match rates, time-to-fill—while rendering the job seeker functionally invisible (Bogen & Rieke, 2018). There is no public feedback loop through which candidates can see what worked, identify ghosting employers, or surface misleading job posts.

Crucially, the user cannot shape the metric. The platform's success is defined without reference to job seeker experience, hiring quality, or long-term outcome satisfaction. This lack of relational tension creates a structural form of algorithmic detachment, where optimization persists even as user trust collapses (Eubanks, 2018). Unlike app stores, where poor reviews or crash reports downgrade visibility, ATS platforms remain insulated from user response—and as a result, from improvement.

5.4 Synthesis: Markets Without Tension Cannot Adapt

Platforms that collapse relational tension cannot evolve. Because user experience is neither visible nor formative, these systems lack the capacity to reflect on what they measure—or to update those measurements in light of emerging truths. They often persist not because they function well, but because they are structurally insulated from the consequences of failure.

Such systems are non-reflexive: unable to integrate outside feedback, blind to their own harms, and self-reinforcing. Users are treated not as participants but as fuel—inputs to be harvested, filtered, and discarded without reciprocal recognition. In economic terms, these are degenerative markets, where growth is decoupled from legitimacy or quality (Pasquale, 2015). Without

tension, there is no adaptation. And without adaptation, systems degrade—

even as they scale.

6 Theory Integration: Tension Is the System

At the heart of adaptive digital marketplaces lies a simple but often

overlooked truth: tension is not a flaw—it is the system. When relational

friction is allowed to surface, be measured, and influence outcomes, platforms

can evolve. But when one actor—typically the platform owner or algorithm

designer—unilaterally defines success, markets become distorted, extractive,

and resistant to correction.

This section integrates two core theoretical principles drawn from platform

studies, measurement theory, and cybernetic systems. Together, they explain

why feedback asymmetry undermines digital markets and why mutuality, not

control, is the precondition for sustained alignment.

6.1 Principle One: Unilateral Measurement Produces Drift

Measurement is never neutral. As sociologist Donald MacKenzie (2006) and

philosopher Ian Hacking (1990) have shown, metrics shape the realities they

claim to observe—a phenomenon echoed in Marilyn Strathern's paraphrase

of Goodhart's Law: *"When a measure becomes a target, it ceases to be a good*

measure." This is particularly acute in digital platforms, where algorithmic metrics become self-fulfilling predictors of value.

In systems with unilateral measurement, platform operators define success using internal metrics (e.g., clicks, completion funnels, resume volumes) that are insulated from user experience. Over time, this produces metric drift: the decoupling of what is measured from what matters (Muller, 2018; O'Neil, 2016). Platforms may continue to grow or optimize internally, but without tension—without friction between user goals and platform logic—they cannot calibrate. Instead, they ossify.

6.2 Principle Two: Mutuality Enables Reflection

In contrast, systems that preserve mutual legibility—where user input is visible, consequential, and relational—can reflect on their own performance. This aligns with principles of cybernetic feedback (Ashby, 1956; Wiener, 1948), in which dynamic systems maintain equilibrium by integrating signals from multiple nodes.

This form of mutuality does not require co-governance or democracy, but it does require consequence: user experience must matter to the system's functioning. In adaptive platforms (e.g., Amazon, app stores), negative reviews, dropout rates, or flagging engagement directly impact visibility and

monetization. In extractive systems (e.g., ATS, recruiting platforms), user harm is unmeasured and thus unmitigated.

Put differently: markets do not exist where one actor defines measurement and outcome alone. Markets emerge where friction is structurally encoded— where users can express discontent, alter reputations, and provoke change. This is not disorder; it is the condition for collective learning.

6.3 Tension as Systemic Integrity

We argue, therefore, that relational tension is a precondition of systemic integrity. It is the mechanism by which platforms remain aligned with user needs, avoid drift, and correct internal errors. Without it, systems devolve into extractive loops: generating outputs that optimize internal efficiency while eroding external legitimacy.

This reframes tension as an epistemic asset—a feature that protects systems from the blindness of self-reference. Rather than seeing user discontent as a threat, tension-aware design treats it as feedback from the real, a signal that what matters may no longer match what is measured.

7. Scope and Limitations

This paper offers a conceptual framework for understanding platform market behavior through the lens of relational tension and feedback asymmetry. It is not an empirical analysis, nor does it draw from direct platform instrumentation or behavioral datasets. Instead, it synthesizes insights from systems theory, platform studies, and digital market design to propose a comparative model of *tension-based adaptability* in centralized digital systems.

7.1 Conceptual Nature

The model developed herein is theoretical, aimed at illuminating structural dynamics rather than testing hypotheses. While informed by observed platform behaviors and comparative case reasoning, it does not present statistically validated findings or controlled simulations. As such, its primary contribution is explanatory: it articulates a lens through which different platform outcomes—adaptive versus extractive—can be understood as functions of relational structure.

7.2 Platform Type

The framework is scoped to centralized, single-sided, digital platform markets—systems in which user participation occurs along a dominant axis (e.g., buyer→seller, applicant→employer), and where the platform operator

retains primary control over measurement and visibility logic. Examples include e-commerce sites, online learning portals, and hiring systems. The model presumes a high degree of platform governance centrality, and it may not generalize to decentralized architectures or networks with participatory governance mechanisms.

7.3 Exclusions

The paper does not model:

- Federated platforms, in which decision-making or ranking logic is distributed across actors or nodes;

- Symmetric feedback environments, such as marketplaces with real-time bilateral reviews (e.g., Airbnb);

- Multi-party networks, where multiple overlapping user roles (e.g., driver, passenger, advertiser) co-determine platform behavior through reciprocal interactions.

These cases introduce feedback geometries and power dynamics not captured in this initial formulation. They likely require distinct analytical tools and will be addressed in future expansions of this framework (see Principle 3: Feedback Geometry, forthcoming).

7.4 Directions for Future Research

To advance this model, several research avenues are proposed:

- Agent-based simulations to explore how different feedback mechanisms influence platform equilibrium, drift, and user trust over time;

- Empirical validation through comparative case studies of platform redesigns that introduce (or remove) feedback asymmetries;

- Quantitative modeling of relational tension as a measurable construct, potentially operationalized through user churn, engagement volatility, or adaptive velocity;

- Extension to multi-sided platforms, with attention to how feedback interlocks (or fails to) across stakeholder groups.

These directions could refine the framework and strengthen its applicability across a broader range of digital and hybrid markets.

8. Conclusion: Mutual Tension as Market Integrity

Markets are not static products or closed systems. They are dynamic relationships—defined, constrained, and animated by tension between divergent participant needs. In adaptive systems, this relational tension is

preserved through feedback loops that allow users to shape what is measured and, by extension, what is valued. These systems maintain a form of structural integrity because they are capable of self-correction.

By contrast, extractive platforms collapse this feedback tension. They treat users not as participants in a shared measurement regime, but as inputs to be optimized for internal metrics. This erasure of user influence severs the feedback that enables reflection. Once a platform can no longer reflect on what it measures, it loses the capacity to evolve.

This insight leads to a central principle: the ability of a system to reflect on what it measures is directly correlated with the degree to which user feedback is structurally preserved. Power without counterweight produces measurement drift, outcome misalignment, and systemic decay.

Without tension, there is no market—only machinery.

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